Theme: Poster Paper, Theme 33. History of Geosciences

Boris Sergeevich Sokolov: Russian Academician, geoscientist, naturalist, philosopher, historian and humanitarian in the 20th and 21st centuries.

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Boris Sergeevich Sokolov stands as a beacon for the way in which a life can be lived and how curiosity-driven science can lead to a much better understanding of planet Earth and its long history – with a stunning relevance to planning of the future. He stands as an icon of determination in pursuing the many paths before untrodden, driven by his childhood curiosity, unabashedly. He is a guiding light for moral behaviour towards colleagues during changing times in Russian history, when this was no easy task. His work on the Proterozoic history preserved in the vast expanses of the Russian Federation, from Siberia to western China, from the Ukraine to the Urals and his continued contacts with global researchers in the 20th and 21st centuries has led to major advances in the understanding of the early evolution of the Kingdom Animalia and the conditions under which these fundamental changes in the biota of the planet occurred. Both as a researcher and as a top level administrator in the Russian Academy of Sciences his guidance has surely impacted on Russian geosciences.

Theme: Poster Paper, Theme 1: Geoscience for Society and Theme 23, Evolution of the Biosphere

The Artist and the Scientists: Imaging the Past

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Conceiving of how the past really was can be difficult, and though it can be carefully described and documented with text, imagery in the form of detailed and research supported art can have impact that 1000 words (or more) cannot express. One group of researchers, one of whom happens also to be a skilled artist, has produced some of the most exquisite and as close to reality fossil reconstructions in the history of the skill. The importance of such research-accurate art is in consolidating the multidisciplinary research leading to in depth understanding of past times. This type of in depth imagery needs to be clearly distinguished from the more fantastical palaeoart often appearing in the popular press, or for that matter even in research publications. There is a critical difference in these two styles, and the art of Peter Trusler is an excellent example of the much needed approach to palaeoart that is so important in transmitting complex ideas and generating further investigation.

Theme: Poster, Theme: Geoscience Education

The Importance of Early Childhood Geoscience Education

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Geosciences education, and Science education in general, is urgently needed for the growing young population of planet Earth. In times of significant increase of a population that demands more and more natural resources, especially those that are energy productive, the youth of today need to be informed concerning the cost to the planet (especially the climate) and the availability of these resources in the future. Thus, from an early age, an education in the basics of science (of importance geosciences) and beginnings of understanding of the impact imposed by the use of natural resources, sometimes limited, can serve as a training ground for a population that in the future will be making strategic decisions about how humanity uses the bounty of the planet. A recent project spearheaded by an academic and a Nobel Laureate to engage the young people of the new country Timor-Leste serves as one example of how such geosciences education can be enacted: *O Mundo Perdido Timor-Leste. A Boy and Crocodile Travel Through Time*, now in more than 12 languages.

Theme: Poster, Theme: Geoscience Education

The Importance of Public Exhibitions in Geosciences Education

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Public exposure to front-line research, especially to the accurate representation of research results is sometimes misguided when the reports, in the media, both print and visual, are not fully checked by the very scientists who have indeed carried out the research. One way of making sure that the popular presentation of such accurate research results reach the deserving public, both youth and adults, is to have exhibition designers and constructers working close with the research scientists themselves and cooperative team members who value each other. Exhibitions mounted since the early 1990's by the Monash Science Centre, Monash University, Melbourne Australia in cooperation with a broad spectrum of research scientists around the globe have led to such successful productions as *The Great Russian Dinosaurs*, *Wildlife of Gondwana*, and a newly developing project *The Artist and the Scientists*, which provides a unique insights into how accurate visual images of scientific outcomes is worth much more than 1000 words!

Theme: Poster, Theme: The Proterozoic Earth

Theme: Poster, Theme: The Proterozoic Earth

New Discoveries of Ediacarans/Vendians in Namibia, Saudi Arabia, India and Argentina

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Over the past 5 years a concerted effort has been made under the umbrella of IGCP projects 493 and 587 (www.geosci.monash.edu.au/precsite) to investigate areas with good outcrop of Neoproterozoic sediments in the search for metazoan remains – in places that have not produced any or only low biodiverse assemblages. Fossils of Ediacaran/Vendian-aged metazoans in Namibia have been known since the early part of the 20th century, but exploration over the last few years has increased knowledge significantly and added to a more in depth understanding of both the morphology and taphonomic setting of many of the forms long known. Work in Saudi Arabia, India and Argentina has also led to the discovery of some new body fossils and traces, mainly of non-bilaterians. Thus, these are areas of continued interest. One of the probable restrictors in the Saudi Arabian late Neoproterozoic metazoan record is the likely fresh water source of sediments in basins of appropriate age (@560 +/-).